

# GAO Highlights

Highlights of [GAO-17-794](#), a report to congressional requesters

## Why GAO Did This Study

Since the attacks of September 11, 2001, TSA has spent billions of dollars on aviation security programs. However, recent attacks involving aircraft and airports in other countries underscore the continued threat to aviation and the need for an effective aviation security program.

GAO was asked to review TSA's passenger aviation security countermeasures. This report examines the extent to which TSA has (1) information on the effectiveness of selected passenger aviation security countermeasures and (2) systematically analyzed the cost and effectiveness tradeoffs among countermeasures.

GAO reviewed TSA documentation on the effectiveness of six passenger aviation security countermeasures in fiscal year 2015—the most recent year for which data were available. GAO selected these countermeasures because they involve direct interaction with passengers, their belongings, or their personal information, and are largely operated and funded by TSA. GAO also reviewed TSA documents and interviewed TSA officials regarding efforts to systematically analyze cost and effectiveness tradeoffs across countermeasures.

## What GAO Recommends

GAO recommends that TSA (1) explore and pursue methods to assess the deterrent effect of TSA's passenger aviation security countermeasures, with FAMS as a top priority to address, and (2) systematically evaluate the potential cost and effectiveness tradeoffs across aviation security countermeasures. DHS concurred with these recommendations.

View [GAO-17-794](#). For more information, contact Jennifer Grover at (202) 512-7141 or [groverj@gao.gov](mailto:groverj@gao.gov).

September 2017

## AVIATION SECURITY

# Actions Needed to Systematically Evaluate Cost and Effectiveness Across Security Countermeasures

## What GAO Found

The Transportation Security Administration (TSA) has data on the effectiveness of some, but not all of its passenger aviation security countermeasures. Specifically, TSA has data on passenger prescreening, checkpoint and checked baggage screening, and explosives detection canines. Further, TSA is taking steps to improve the quality of this information. However, it does not have effectiveness data for its Behavior Detection and Analysis (BDA) program and the U.S. Federal Air Marshal Service (FAMS). For BDA—a program to identify potential threats by observing passengers for behaviors indicative of stress, fear, or deception—in July 2017, GAO reported that (1) TSA does not have valid evidence supporting most of its behavioral indicators, and (2) TSA should continue to limit future funding for its behavior detection activities until it can provide such evidence. For FAMS—a program that deploys armed law enforcement officers on certain flights at an annual cost of about \$800 million for fiscal year 2015—officials reported that one of the primary security contributions is to deter attacks. However, TSA does not have information on its effectiveness in doing so, nor does it have data on the deterrent effect resulting from any of its other aviation security countermeasures. While officials stated that deterrence is difficult to measure, the Government Performance and Results Act of 1993, as updated, provides that agencies are to assess the effectiveness of their programs. Further, the Office of Management and Budget and GAO have suggested approaches for measuring deterrence. Developing such methods for TSA countermeasures, especially for an effort such as FAMS in which the primary goal is deterrence, would enable TSA to determine whether its substantial investment is yielding results.

TSA has a tool to compare the security effectiveness of some aviation security countermeasures, but has no efforts underway to systematically evaluate potential cost and effectiveness tradeoffs across all countermeasures. In 2014, the agency developed a tool to analyze the security effectiveness of alternate combinations of some countermeasures for the purpose of informing acquisition and deployment decisions, but does not have a tool to assess such tradeoffs across the entire system of countermeasures. TSA officials explained that the aviation security system is constantly evolving, and assessing a system in flux is challenging. However, DHS policy and TSA's strategic plan call for the systematic evaluation of costs and effectiveness of TSA's chosen mix of aviation security countermeasures. Without such an analysis, TSA is not well positioned to strike an appropriate balance of costs, effectiveness, and risk.

This is a public version of a classified report that GAO issued in August 2017. Information that TSA deemed classified or sensitive security information, such as the results of TSA's covert testing and details about TSA's screening procedures, have been omitted.